Superfund Acquisition Strategy
Signature Sheet
NL Industries/Taracorp
Granite City, Il

1. The attached MFR was prepared by:

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2. The attached MFR was reviewed by:

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3. The attached MFR was approved by:

Donald E. Needham 8 May 91
LT. COL. DONALD NEEDHAM, CEMRO-DC — Contracting Officer

PUSH ED-D FOR A IN HOUSE design DECISION AT 90 days PRIOR to START of design. 30 days IS too SHORT /Ed

CEMRO-ED-ED (200) 26 March 1991

MEMORANDUM FOR RECORD

SUBJECT: Superfund Project Management Acquisition Strategy, NL Industries/Taracorp, Granite City, Illinois, 25 March 1991

1. Project Description:

a. Past History

The Taracorp site is located at 16th Street and Cleveland Boulevard in Granite City, and occupies 15.8 acres, including a 3.5 acre slag storage area. Operations at the site have included metal refining, fabricating, and related activities since the turn of the century. The facility began operations as Hoyt Metal in 1903. It was later sold, and became United Lead. NL Industries purchased United Lead in 1928 and operated the facility until 1979 when it was purchased by Taracorp Inc. Taracorp Inc. currently operates the metal fabrication facility at the site.

Lead pollution in the area is believed to be partially a result of lead smelting conducted at the site from approximately 1905 until 1983. The smelter was used for purifying and reprocessing lead-containing scrap, used batteries and cable sheathing. Solid wastes generated from the process included blast furnace slag, battery cases, and dust from the smelter's smoke stack. These wastes were stored on-site in waste piles. The largest pile (Taracorp pile) contains approximately 250,000 tons of lead-containing solid wastes.

Another storage area of waste piles is located on the St. Louis Lead Recyclers (SLLR) property which is directly south of and adjacent to the Taracorp Inc. property. The wastes at SLLR were the result of recycling the original waste piles. The largest of the SLLR piles (SLLR pile) contains 6000 tons of lead contaminated rubber. A third location of contamination attributed to the site is the remote fill areas of Venice and Eagle Park Acres where lead-containing battery case pieces were allegedly used for fill and alley paving material.

The Illinois EPA began monitoring air quality for lead on a state-wide basis in mid-1978. Eighty-five percent of the air samples from three Granite City air quality monitors which were analyzed between 1978 and 1981 had lead levels exceeding federal standards. In July 1981, the State of Illinois was required by U. S. EPA to develop a plan to control and maintain federal air quality standards for lead in Granite City. An intensive investigation of the Taracorp Inc. facility by Illinois EPA in mid-1982 found the Taracorp Inc. operations were the primary source of lead pollution detected in area air and soil. Following the 1982 investigation the State of Illinois denied an application for renewal of Taracorp's permit to operate the smelter. Taracorp Inc. filed for bankruptcy in December 1982 shortly after the site was proposed for the National Priorities List (NPL).

NL Industries former owners of the facility, entered into a legal

agreement with U. S. EPA and Illinois EPA in March 1985. The agreement, a consent order, requires the company to conduct an RI and FS. The RI included the Taracorp Inc. property, the waste piles at SLLR, the remote fill areas of Venice and Eagle Park Acres, and the surrounding air, water and soil.

b. Major Contaminants

Taracorp Pile. Located on the site is a pile composed primarily of blast furnace slag and battery case material. The volume of the pile is approximately 85,000 cubic yards. In addition, smaller piles immediately adjacent to the Taracorp pile, which were associated with the adjacent SLLR recycling operation, comprise approximately 2450 cubic yards. Tests conducted on the materials in the Taracorp pile and small SLLR piles demonstrate lead concentrations in the range of 1-28%. In addition, on the surface of the pile are 25-35 drums and containers holding solid wastes from the smelting operations which normally would be recycled.

Area 1. Area 1 consists of property owned by Trust 454 and Tri-City Trucking. Trust 454 property contains a pile of battery case materials (the SLLR pile) as well as unpaved areas. The SLLR pile contains approximately 4000 cubic yards in two general areas. The lead concentration range in this pile was 10-30%. Analysis of the unpaved area indicate a lead concentration at the surface of 9250 mg/kg. Analysis of soils from areas around the Tri-City Trucking property suggest that the soils contain lead concentrations in the range of 12,000 to 75,000 mg/kg.

Surface Soils. Surface soils samples were collected from 50 locations not including Taracorp or Trust 454 properties. the results indicate that the lead concentration in surface soils within 1/4 mile of the site boundary were higher than those further from the site. Samples collected from the surface generally contained more lead that the deeper samples.

Eagle Park Acres. Eagle Park Acres includes some vacant land to which battery case material was previously hauled. Testing of the soil in this area indicated surface lead concentrations ranging from 63 mg/kg to 3280 mg/kg.

Venice Township Alleys. According to residents in the area, Venice Township hauled hard rubber case material to unpaved alleys in Venice Township. Tests conducted on these alleys resulted in a wide range of lead concentrations.

c. Scope of Work

Pre-design. The pre-design work will consist of soil lead sampling in the residential areas of Eagle Park Acres, Venice and Granite City areas 2-8 and the immediately adjacent properties to determine the depth to which each individual residential yard must be excavated to achieve a 500 ppm soil lead cleanup level and the depth to which Area 1 must be excavated to achieve a 1000 ppm cleanup level. Inspections of alleys and driveways and areas containing surficial battery case material in Eagle Park Acres, Venice, Granite City, Madison, and other nearby communities shall be conducted to determine which specific areas not already identified in the Record of Decision need remediation. Sampling using the TCLP method for lead shall be conducted in all affected areas prior to removal of the battery case material.

Remedial Design and Remedial Action. After all materials have been transported to and consolidated with the Taracorp pile, the consolidated pile shall be graded and capped with a RCRA-compliant, multimedia cap. A clay liner shall be constructed on all areas upon which consolidation materials are to be placed as part of this remedy. A fence shall be designed in a manner sufficient to prevent access to the expanded Taracorp pile. A minimum of one deep well upgradient from the expanded Taracorp pile and three deep wells downgradient from the expanded Taracorp pile shall be installed to monitor quality in the lower portion of the upper aquifer. Monitoring of these wells and fourteen existing wells shall be conducted semi-annually for a minimum of 30 years. Air monitoring for lead shall be performed annually at a minimum of two locations adjacent to the site, for a minimum of 30 years.

d. EPA Requirements.

Mr. Brad Bradley, EPA Region V, attended this strategy acquisition meeting to discuss the requirements and schedule for this project. He also provided the background information on this site and EPA's current plans of action. The EPA is asking COE-Omaha to perform the pre-design and remedial design work. He stated the remedial action will probably include oversight by the Corps with the PRPs leading. EPA requests that the remedial design be complete by December 1992. Mr. Bradley concurred with the strategies selected during this meeting.

e. Land Acquisition

The Corps of Engineers can help with the land acquisition as necessary for this project. At this time, EPA Region V prefers to attempt to obtain permission from the land owners for unrestricted access to their property to accomplish the work necessary for this project. Actual purchase of land for this project is not anticipated at this time. The Corps will become involved in land acquisition and/or property access when EPA requests assistance in this action.

2. U. S. Army Corps of Engineers' Role:

The USACE will be responsible for developing a technical statement of work and developing the design through one of the contracting mechanisms available. The specifics for pre-design, remedial design and remedial action are as follows:

a. Pre-Design

Pre-design activities include soil lead sampling in Area 1 and all residential areas and immediately adjacent properties to determine the depth to which each individual residential yard must be excavated to achieve a 500 ppm soil lead cleanup level and the depth to which Area 1 must be excavated to achieve a 1000 ppm cleanup level. Inspections of alleys and driveways and areas containing surficial battery case materials in Eagle Park Acres, Venice, Granite City, Madison, and other nearby communities shall be conducted to determine which specific areas may need remediation. Lead sampling of all identified areas which are not alleys or driveways shall be conducted to determine the depth to which such areas must be excavated to achieve a 500 ppm cleanup level. An inspection of each home shall be attempted and the following observations made: (1) Is there paint peeling in the house? (2) Is there lead piping or lead solder

joints? (3) In what condition is the house? The EPA will only recommend that the residents consider pursuing their own remedy to these possible sources of lead poisoning. No remedial action will be taken in the private residences by EPA.

The Pre-design work will be done by an indefinite delivery contractor. It is anticipated that funds in addition for those provided under the current design IAG may be required to support all pre-design activities. USACE will estimate the total cost as soon as all tasks are defined and EPA will provide new funds in a new IAG.

b. Remedial Design

USACE will determine in November 1991 if the in-house design forces are available to perform the remedial design. The pre-design work should be completed at the end of February 1992. If the in-house forces can not support this project, USACE will be responsible for the acquisition of a RD Architect-Engineer and developing a Scope of Services (SOS) for design. Once a design contract is awarded, the USACE will provide technical oversight of the RD contractor through reviews of Architect-Engineer submittals, participating in design review conferences, and preparation of the design documents through contract award.

c. Remedial Action

The USACE may be responsible for advertising and award of the RA contract if the EPA so requests. The EPA is presently talking to the PRPs about performing the remedial action. If the USACE receives this responsibility it will include Engineering and Design support during the construction project. After the RA contract is awarded, it will be transferred to the local USACE construction district (Chicago District). If residents remain on site , the RA contractor will be required to maintain safety standards adequate for their protection.

3. Acquisition Strategies Considered:

a. Pre-Design

(1) In-house. A request for design services was forwarded to Engineering Division on 19 March 1991. The responses received from Engineering Division recommended that the pre-design be performed by an Architect-Engineering firm. **Due to the tight schedule on this action an Indefinite Delivery Architect-Engineer is the only choice.**

(2) Site Specific Architect-Engineer. This method allows a variety of A-E companies to submit their qualifications in order to be selected for the design. Although it requires more time to make the selection than using an indefinite delivery type contract, it allows the selection of an A-E whose services can be more tailored to the specific site requirements. A site specific A-E contract would not meet the schedule of the pre-design work.

(3) Indefinite Delivery Architect-Engineer. This method would allow the pre-design work to be awarded so that the pre-design field work could be

accomplished before the next winter season. This is the intended method of contracting the pre-design.

b. Remedial Design

(1) In-house. The USACE in-house forces will be asked in January 1992, one month after the pre-design has begun, for their capability to perform the remedial design. It will be necessary for the pre-design and the design work to overlap after the draft report from the pre-design is submitted. If in-house forces are not available then the same indefinite Architect-Engineer will be approached to perform the design.

(2) Site Specific Architect-Engineer. This method would be time consuming and would not meet the completion date required. A site-specific A-E can be more tailored to the site requirements but this site does not included any extraordinary characteristics.

(3) Indefinite Delivery Architect-Engineer. This method will allow the possibility of contracting with the same A-E performing the pre-design work and would allow the pre-design and design work to overlap and ensure the schedule for the remedial design is met.

c. Remedial Action

(1) Invitation for Bid (IFB). This project would contain plans and specifications for the remedial action, therefore, a fixed price bid would be acceptable for the project.

(2) Request for Proposal (RFP). There are no site specific technologies anticipated to be used in this contract, therefore, a request for proposal is not necessary and would probably cost the Government more than an IFB.

(3) Pre-placed Remedial Action Contractor and Rapid Response. Both of these methods are not warranted for this project based on the actual cleanup methods and schedule.

4. Plan of Action Selected:

The contracting methods selected are considered to be the optimum choices for executing the Pre-design, RD and RA for this site. The Pre-design will be accomplished with an indefinite delivery A-E, the RD will be accomplished by in-house forces if the support is available; or by an indefinite A-E if necessary. The RA will be accomplished with an IFB package if the EPA assigns this responsibility to the USACE instead of the PRPs. If the PRPs take the lead on the RA, the Corps will provide oversight of this for the EPA.

5. Proposed Schedule:

Pre-Design	
Draft Scope Of Services	3 May 1991
Negotiations Complete	30 Jun 1991
Award Pre-Design	7 Jul 1991
Draft Pre-Design	28 Feb 1992
Pre-Design Complete	30 Apr 1992

Design	
Draft Scope of Services	12 Nov 1991
Award Design	28 Feb 1992
60% Design Complete	30 Jun 1992
100% Design Submitted	1 Oct 1992
Final Design Complete	20 Dec 1992